

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/674,454	09/30/2003	Klaus M. Irion	02581-P0548A	4126	
24126 7	7590 10/04/2005		EXAMINER		
ST. ONGE STEWARD JOHNSTON & REENS, LLC 986 BEDFORD STREET			LEUBECKER, JOHN P		
STAMFORD, CT 06905-5619			ART UNIT	PAPER NUMBER	
ŕ			3739		

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/674,454	IRION ET AL.				
Office Action Summary	Examiner	Art Unit				
	John P. Leubecker	3739				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
Responsive to communication(s) filed on <u>30 Second</u> This action is FINAL . 2b)⊠ This Since this application is in condition for allowar closed in accordance with the practice under Expression in the Expression in the practice under Expression in t	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) ☐ Claim(s) 1-30 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-30 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ accertain and request that any objection to the example of the specification of the example of the specification and request that any objection to the example of the specification is cheet(s) including the correct.	vn from consideration. r election requirement. r. epted or b) □ objected to by the beginning(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9/30/03.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 3739

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rotation of at least one of the imagers about an axis transverse to an image recording surface (or, more specifically, how such rotation occurs) must be shown or the feature(s) canceled from the claim(s). In addition, the positioning device as claimed in claims 9, 19 and 28 must be shown or the feature(s) canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Art Unit: 3739

2. Claims 1-30 are objected to because of the following informalities:

a) in claim 1, line 12 (second to last line), "at least one" before "second image field" should be deleted;

b) in claims 2-4, "at least one" before "second imaging system" should be deleted;

c) in claim 4, "wherein" should be inserted between "1," and "said";

d) in claim 6, "distal to proximal" should be -distal end to proximal end--;

e) in claim 10, "at least" should be deleted.

Only claims 1-11 have been reviewed and examples are mentioned above. Applicant is required to review and correct all informalities in all claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 7, 17 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to provide adequate description as to how at least one of the first and second imagers can be rotated about an axis transverse to an image recording

Art Unit: 3739

surface. In both disclosed embodiments, the imagers are physically connected to one other (note direct mutual contact between connection pads 72,74 in Figure 2 and the direct connection of each imager to a common circuit board in Figure 4). There is no description or even an implication as to how one imager can be rotated with respect to the other (or even how both imagers can be rotated with respect to the lens system) while being physically attached to either the other imager or to a common circuit board.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 7, terms "first objective" and "second objective" lack antecedent basis.

Only claims 1-11 have been reviewed and mentioned above. Applicant is required to review and correct all instances of indefiniteness in all claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 10/674,454

Page 5

Art Unit: 3739

8. Claims 1-5, 7, 8, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki (U.S. Pat. 5,989,185).

Miyazaki disclose a housing (2), a first objective (40A,Fig.8), a second objective (40B, Fig.8), a first electronic imager (right half of 41), and a second electronic imager (left half of 41). The objectives can be different in direction of view (Fig.8) or aperture angle (note 73,74, Fig.11). Rotation of the endoscope will cause rotation of at least one imager about the longitudinal axis. At least one illumination system is provided (71,72, Fig.11). The device of Miyazaki can be considered an endoscope shaft and a video camera unit with a guide shaft.

9. Claims 12, 14-18, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki et al. (U.S. Pat. 4,873,572).

Miyazaki et al. disclose a housing (1), a first electronic imager (214a,Fig.10), a second electronic imager (214b), wherein a signal line for reading out and for voltage supply of the imagers are jointly used (col.12, line 55 to col.13, line 9). The remaining limitations can be seen in Figures 10-13.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 3739

11. Claims 6, 12-18, 22-27, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki in view of Miyazaki et al. (U.S. Pat. 4,873,572).

The first and second imagers of Miyazaki ('185) are formed on one imaging surface and would appear to not require any additional signal lines. Miyazaki et al. ('572) show a similar device wherein use of two separate surfaces (293a,293b,Fig.22) can be alternatively and equivalently used in place of one surface (284, Fig.20) for providing the same function and effect. Due to the level of ordinary skill in this art and the prior contemplation by Miyazaki et al. ('572), it would have been obvious to one of ordinary skill in the art to have provided two separate surfaces in place of the single surface in the Miyazaki ('185) device. As taught by Miyazaki et al. ('572), this would only require one additional signal line (output) since drive signals (which includes power) are used in common (col.12, line 55 to col.13, line 9). If not motivated by the recognized equivalence, the skilled artisan would recognize that such modification would eliminate a total video black-out caused by failure of a single CCD. If one of the two CCDs fails in the modification, the other could still be used. The other features are as described above in numbered paragraph 8 with respect to Miyazaki ('185).

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki ('185) in view of Kudo (U.S. Pat. 6,036,637).

Miyazaki ('185) discloses an endoscope as described above but fails to disclose a positioning device for automatically tracking the visualization apparatus as a function of a position of an operating instrument. Kudo teaches a positioning device for automatically tracking an endoscope as a function of a position of an operating instrument (Fig.3, col.9, line 25

Art Unit: 3739

to col.10, line 6). It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the a positioning system as taught by Kudo with the endoscope of Miyazaki ('185) to automatically always keep an object of interest in the display screen (col.2, lines 32-37), thereby obviating the inadequate use of an assistant (col.1, lines 28-53).

13. Claims 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki ('185) in view of Miyazaki et al. ('572), as described above, and further in view of Kudo, for the same reasons set forth in numbered paragraph 12 above.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are relevant to all or some of the features in the claims:

Siegmund (U.S. Pat. 4,588,294) Forkner (U.S. Pat. 4,838,247)

Sakai et al. (U.S. Pat. 4,875,099) Miyazaki (U.S. Pat. 4,926,257)

Kaiya (U.S. Pat. 5,178,130) Hori et al (U.S. Pat. 5,603,687)

Igarashi (US 2002/0114071)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John P. Leubecker Primary Examiner Art Unit 3739 Page 8

jpl